



# Florida Department of Environmental Protection

Division of Environmental Assessment and Restoration

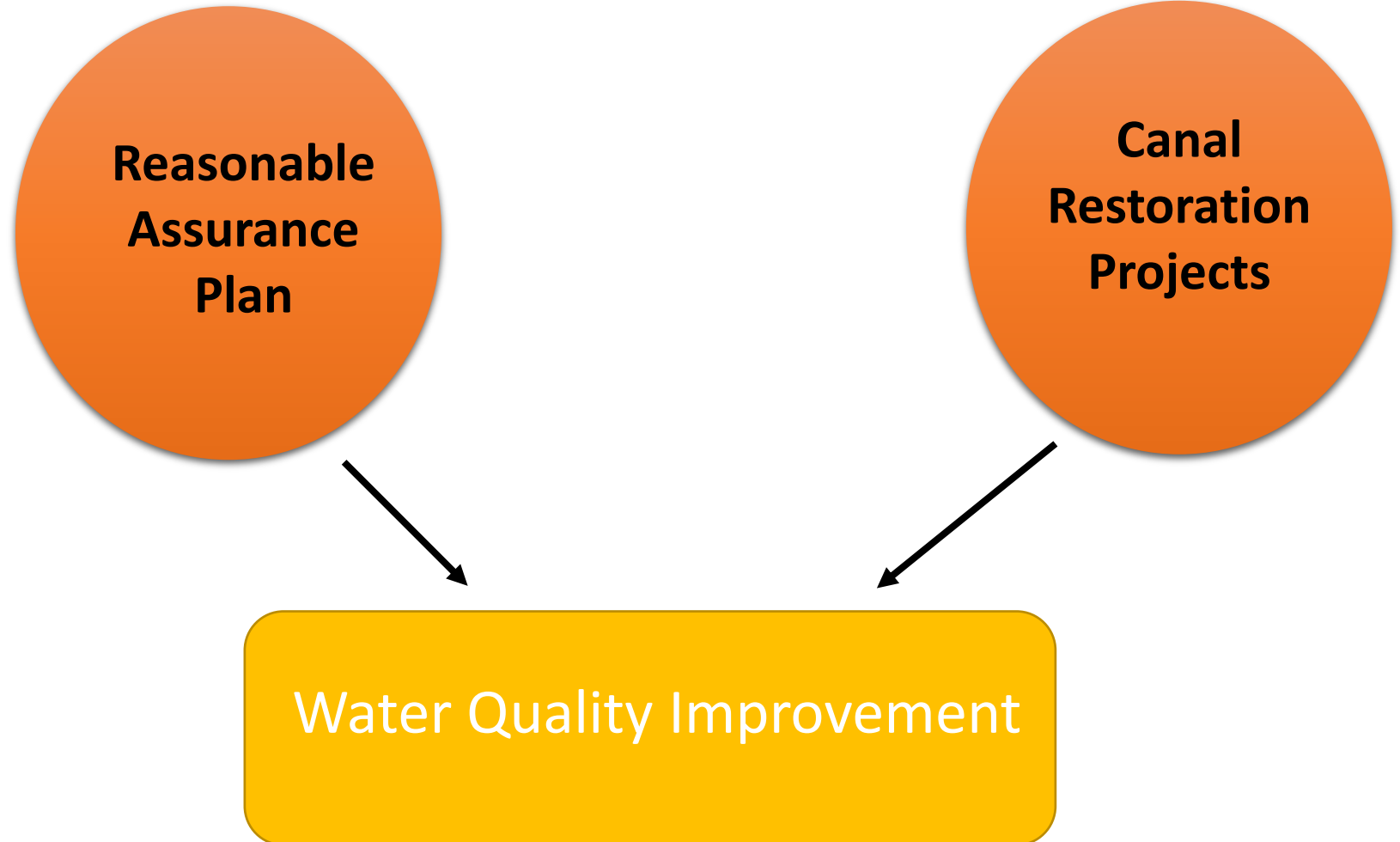
## FL Keys Canals Restoration

January 11, 2017





# Current Strategies





# How did we get here?

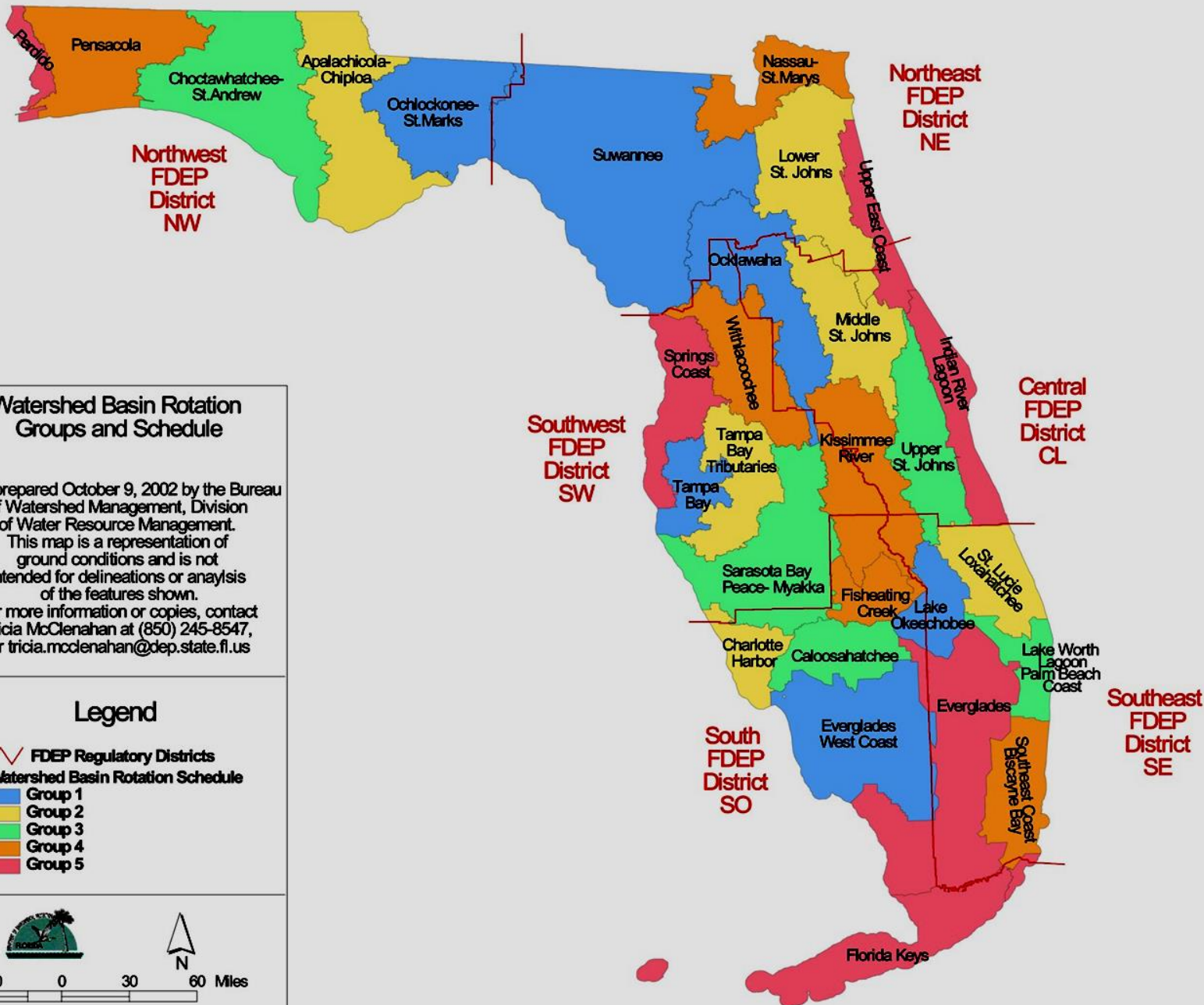
- **DEP's responsibility**
  - assess the water quality of the state's waters
  - identify those that need a Total Maximum Daily Load
- **FL Keys were determined to be impaired for nutrients in 1998**
- **Keys assessed in 2006 and 2011**
  - Next assessment in 2017



# *Designated Uses Addressed by Assessment*

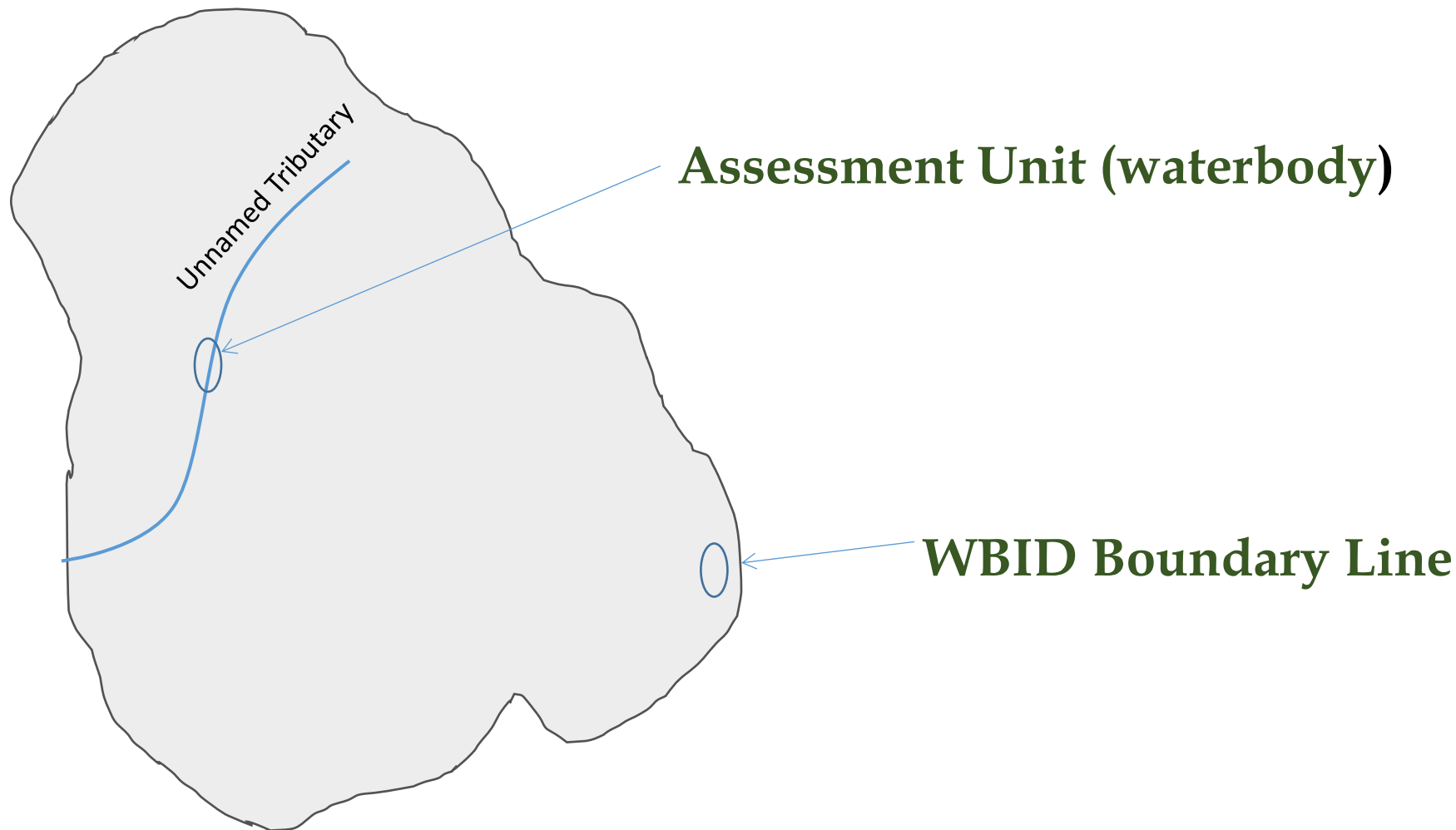
- **Aquatic Life**
  - Metals, Turbidity, Pesticides, Biological assessment
- **Primary Contact and Recreation**
  - Bacteria, Beach advisories
- **Fish and Shellfish Consumption**
  - Pathogenic bacteria, Mercury, Shellfish Classification
- **Drinking Water**
  - Metals, Pesticides, Bacteria

Water Quality Standards 62-302 F.A.C.  
Impaired Waters Rule 62-303 F.A.C  
NNC Implementation Document





# *Waterbody Identification Number - WBID*







# Assessment of Compliance

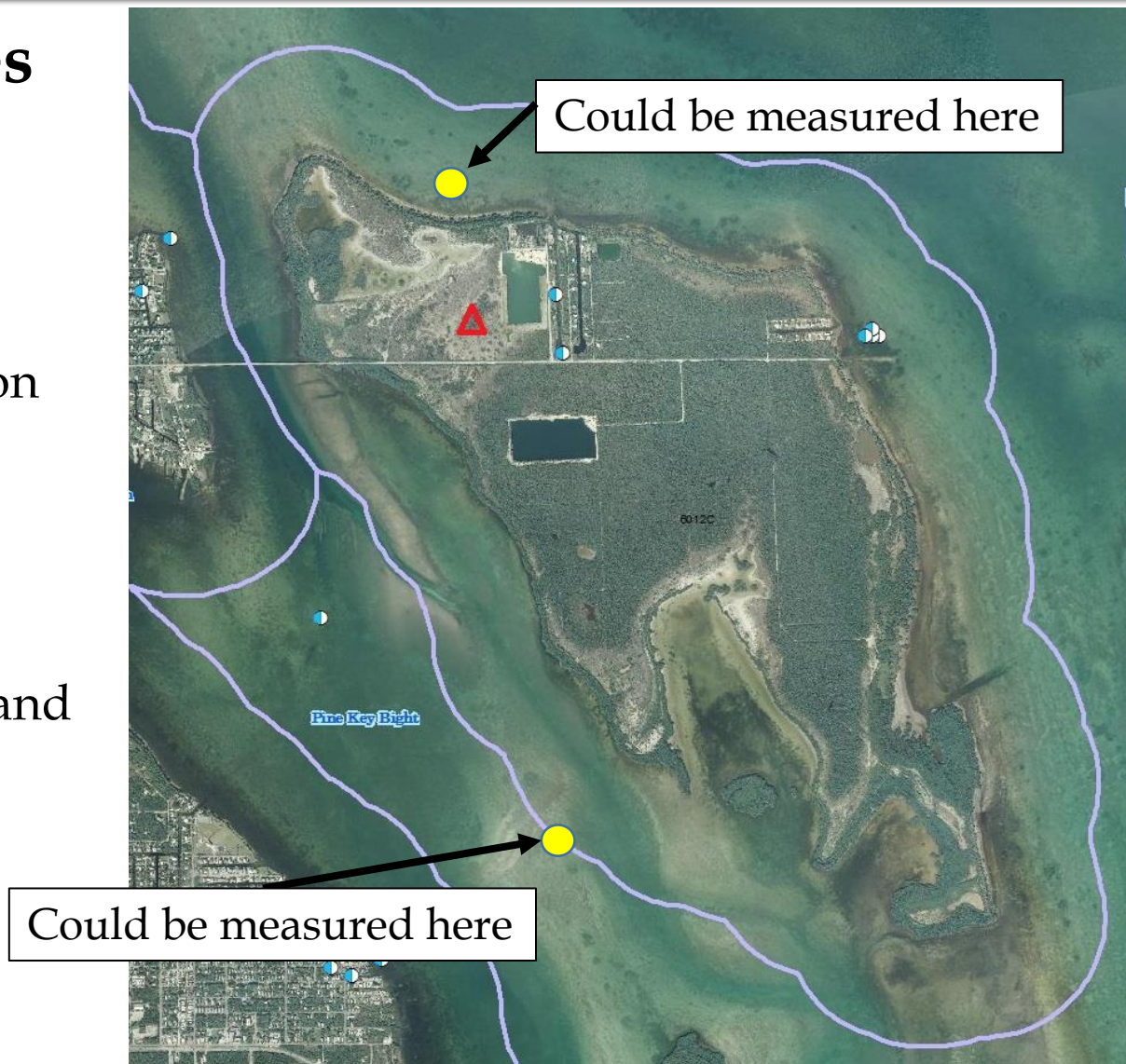
- **Two different types**

- 1) **RA targets**

- Supersede water quality standards, because they are established based on site-specific conditions

- 2) **Water quality standards**

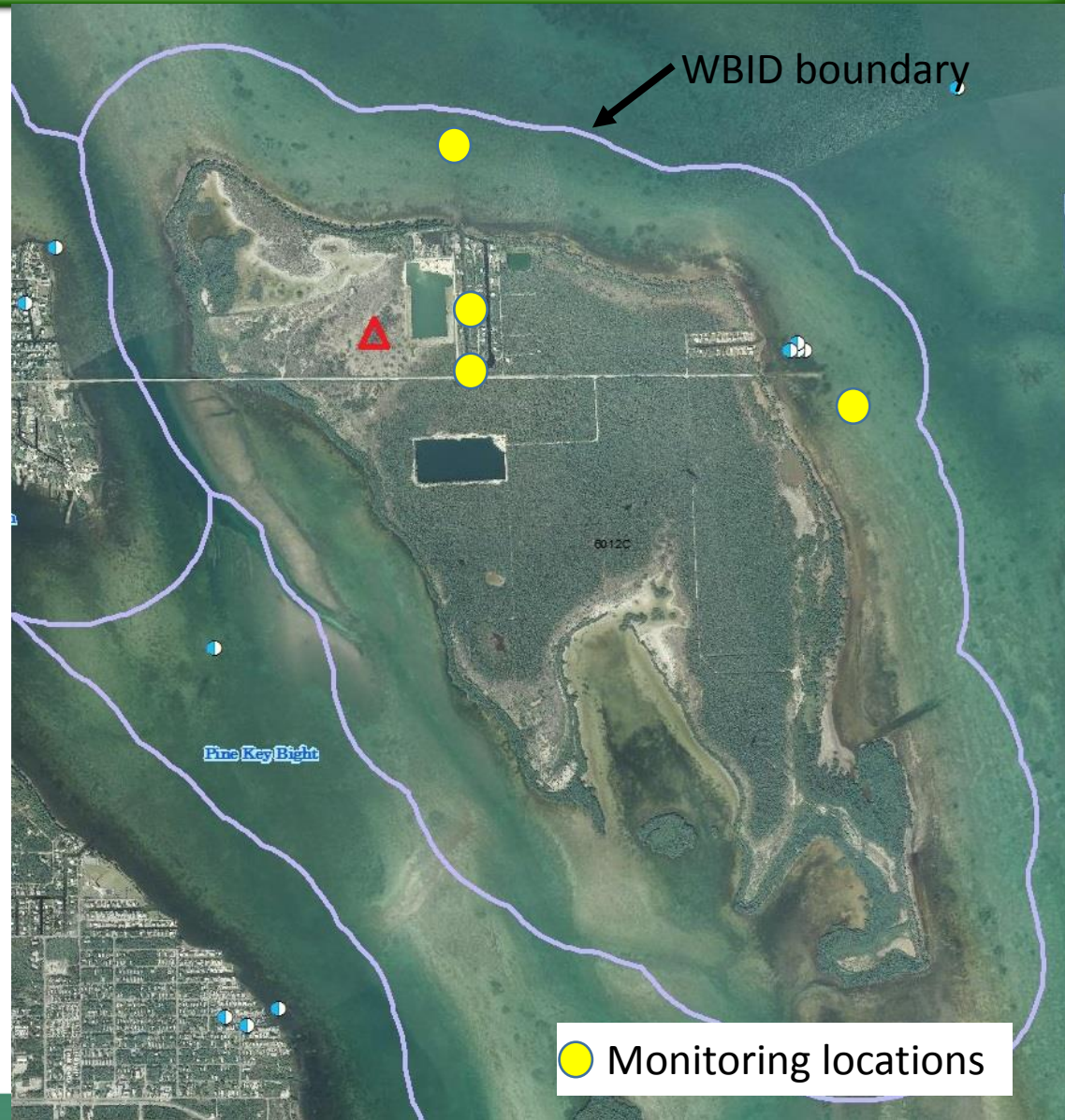
- Dissolved oxygen and other parameters





# Assessment Example

- Assessment performed using data within a WBID boundary (assessment unit)
- Water Quality Standard for DO =  $> 42\%$
- Data are collected from 4 different locations at different times
- All data are evaluated
  - Waterbody is "impaired" for DO because  $>10\%$  of the samples are above the standard







# Assessment Example

## Dissolved Oxygen (DO) Data for Assessment

Sampling Locations	# of Samples	Marine/Estuarine DO Criterion (% saturation)	Sample Collection Method	Sample Type	# of samples below 42% saturation
Station 1	5	42%	Grab	5 single measurements	1/5
Station 2	10	42%	Diel - five, 2-day deployments	10 daily averages	8/10
Station 3	4	42%	Grab	4 single measurements	4/4
Station 4	36	42%	Diel - twelve, 3-day deployments	36 daily averages	20/36
				<b>Total</b>	<b>33/55</b>
				<b>Exceedance rate</b>	<b>60%</b>
				<b>Impaired</b>	



# What does the DEP QA Rule require?

- Use DEP SOPs

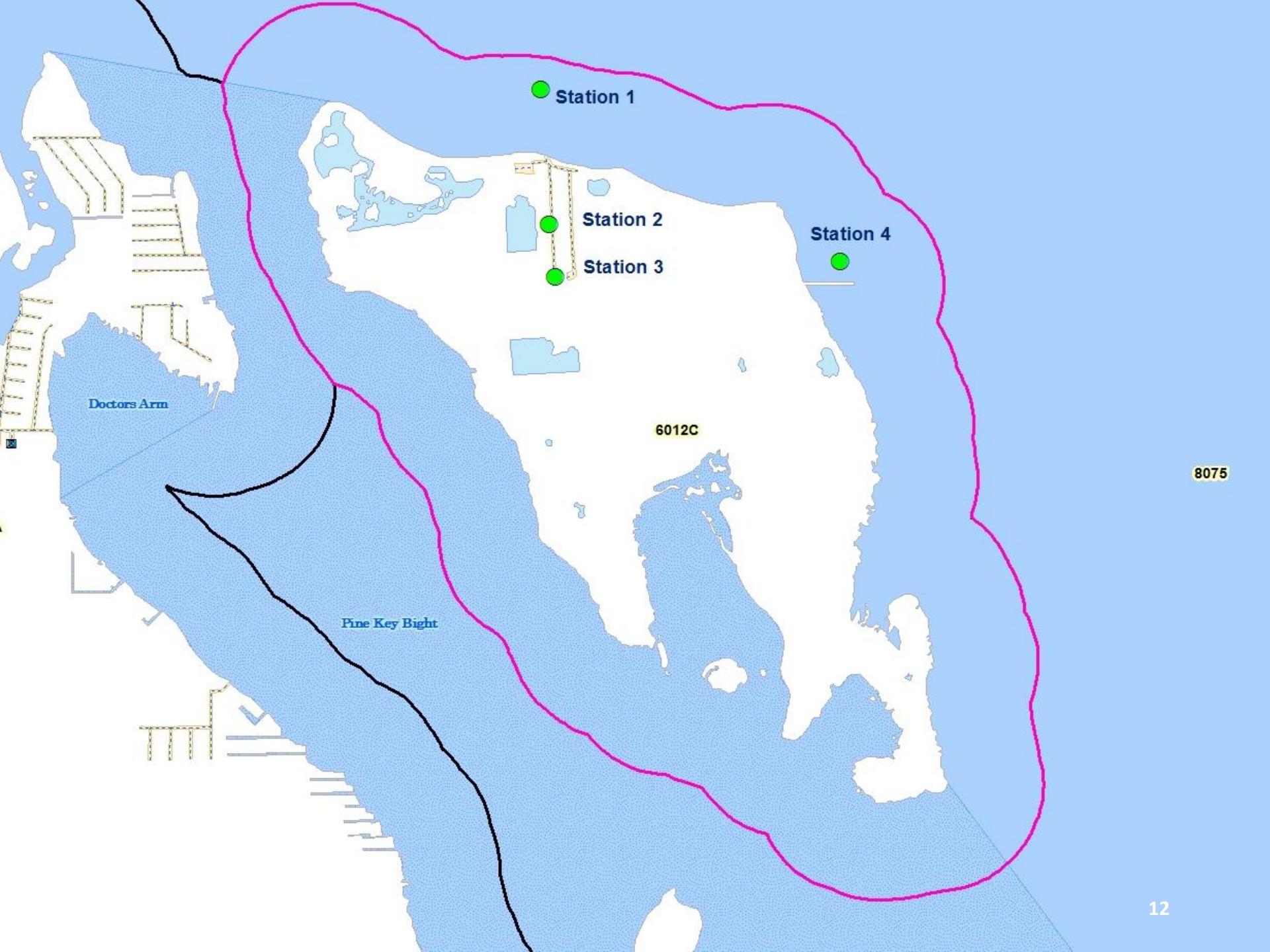
<http://www.dep.state.fl.us/water/sas/sop/sops.htm>

- Pre-approval for alternative field procedures
- Create and retain mandatory documentation
- Follow preservation & holding times
- Submit to audits



# Critical Sampling Considerations

- **Why are we sampling?**
  - Purpose, study design, Data Quality Objectives
- **What does a sample represent?**
  - Where and when to sample







# DEP Assistance

- **Funding Opportunities**
  - EPA 319(h) Nonpoint Source Grant
  - TMDL Water Quality Restoration Grant
  - Monitoring funds
- **Monitoring Assistance**
  - Provide training
  - Staff to perform some monitoring
  - Lab analyses



# Watershed Information Network

- **WIN is the replacement for Florida STORET**
  - Data providers will upload to WIN instead
  - Old data in Florida STORET will still be accessible
- **WIN will be open for uploads in spring 2017**
  - New data can still be uploaded to Florida STORET through December 2017
  - After that, all data will need to come to WIN
- **WIN data must meet minimum quality standards**
  - Providers should be making necessary changes now
  - Contact your WIN coordinator for assistance





# Getting Ready for WIN

- Information for mapping to WIN is provided at [ftp://ftp.dep.state.fl.us/pub/outgoing/STORET/WIN\\_Communication/](ftp://ftp.dep.state.fl.us/pub/outgoing/STORET/WIN_Communication/)
  - Includes MDQS, Standard Values Lists (SVLs), example data files, FAQs and a flow diagram
- Contact your STORET/WIN Coordinators with questions on WIN implementation

District	Coordinator	Phone	E-mail
Central & Statewide	Tommy Adams	850-245-8467	<a href="mailto:Thomas.l.adams@dep.state.fl.us">Thomas.l.adams@dep.state.fl.us</a>
Northeast & Northwest	Justin Nelson	850-245-8510	<a href="mailto:Justin.m.nelson@dep.state.fl.us">Justin.m.nelson@dep.state.fl.us</a>
South	Kyle Ferris	850-245-8049	<a href="mailto:Kyle.ferris@dep.state.fl.us">Kyle.ferris@dep.state.fl.us</a>
Southeast	Vilma Quant	850-245-8544	<a href="mailto:Vilma.quant@dep.state.fl.us">Vilma.quant@dep.state.fl.us</a>
Southwest	Lisa Schwenning	850-245-8509	<a href="mailto:Lisa.Schwenning@dep.state.fl.us">Lisa.Schwenning@dep.state.fl.us</a>



# Questions?

- **Contact Information**

Julie Espy

Water Quality Assessment Program, Administrator

[Julie.espy@dep.state.fl.us](mailto:Julie.espy@dep.state.fl.us)

850-245-8416

Mailing address:

2600 Blair stone Road MS3560

Tallahassee, FL 32301